

[FIG.1]

100 BASE STATION APPARATUS
RECEIVED SIGNAL
TRANSMISSION SIGNAL
5 104 RECEIVED SIGNAL DEMODULATION SECTION
105 SCHEDULER SECTION
106 TRANSMISSION SIGNAL GENERATION SECTION
107 DIRECTIVITY SWITCHING INSTRUCTION SECTION
103 DIRECTIVITY CONTROL SECTION
10 102-1 RECEPTION RF SECTION
102-n RECEPTION RF SECTION
108-1 TRANSMISSION RF SECTION
108-n TRANSMISSION RF SECTION

15 [FIG.2]

200 TERMINAL APPARATUS
RECEIVED SIGNAL
TRANSMISSION SIGNAL
203 RECEIVED SIGNAL DEMODULATION SECTION
20 204 SIR MEASURING SECTION
205 TRANSMISSION SIGNAL GENERATION SECTION
202 RECEPTION RF SECTION
206 TRANSMISSION RF SECTION

25 [FIG.3]

FROM DIRECTIVITY CONTROL SECTION 103
301 TIMER
302 DIRECTIVITY SWITCHING INSTRUCTION SIGNAL

GENERATION SECTION
TO DIRECTIVITY CONTROL SECTION 103

[FIG. 4]

5 START
ST401 PREPARE FOR REPETITION AS MANY TIMES AS
DIRECTIVITIES
ST1402 TRANSMIT REFERENCE SIGNAL WITH DIRECTIVITY N
ST1403 RECEIVE SIR MEASUREMENT RESULT
10 ST1404 TRANSMIT CHANNEL USING ADAPTIVE MODULATION WITH
DIRECTIVITY N
ST1405 ELAPSED PREDETERMINED TIME?
ST1406 REPEAT AS MANY TIMES AS DIRECTIVITIES
END

15

[FIG. 6]

RECEIVED SIGNAL
600 BASE STATION APPARATUS
601 DIRECTIVITY SWITCHING SIGNAL GENERATION SECTION
20 TRANSMISSION SIGNAL
104 RECEIVED SIGNAL DEMODULATION SECTION
105 SCHEDULER SECTION
106 TRANSMISSION SIGNAL GENERATION SECTION
602 DIRECTIVITY SWITCHING INSTRUCTION SECTION
25 103 DIRECTIVITY CONTROL SECTION
102-1 RECEPTION RF SECTION
102-n RECEPTION RF SECTION
108-1 TRANSMISSION RF SECTION

108-n TRANSMISSION RF SECTION

[FIG. 7]

RECEIVED SIGNAL

5 700 TERMINAL APPARATUS
701 DIRECTIVITY SWITCHING DECISION SECTION
203 RECEIVED SIGNAL DEMODULATION SECTION
204 SIR MEASURING SECTION
205 TRANSMISSION SIGNAL GENERATION SECTION
10 TRANSMISSION SIGNAL
202 RECEPTION RF SECTION
206 TRANSMISSION RF SECTION

[FIG. 8]

15 TO DIRECTIVITY CONTROL SECTION 103
801 DIRECTIVITY SWITCHING TIMING DETERMINING SECTION
802 DIRECTIVITY SWITCHING SIGNAL INSERTION TIMING
DETERMINING SECTION
FROM DIRECTIVITY CONTROL SECTION 103
20 TO DIRECTIVITY SWITCHING SIGNAL GENERATION SECTION 601

[FIG. 9]

START
ST901 DEMODULATE RECEIVED SIGNAL
25 ST902 DIRECTIVITY SWITCHING SIGNAL INCLUDED?
ST903 SIR OUTPUT
ST904 SIR DISABLED
ST905 TRANSMIT TRANSMISSION SIGNAL

END

[FIG.10]

DIRECTIVITY SWITCHING SIGNAL

5 SLOT #1

DIRECTIVITY SWITCHING SLOT

1 SLOT

1 SLOT

10 [FIG.11]

RECEIVED SIGNAL

1100 BASE STATION APPARATUS

1102 DIRECTIVITY NUMBER INFORMATION GENERATION SECTION

1101 DIRECTIVITY SWITCHING SIGNAL GENERATION SECTION

15 104 RECEIVED SIGNAL DEMODULATION SECTION

105 SCHEDULER SECTION

106 TRANSMISSION SIGNAL GENERATION SECTION

1103 DIRECTIVITY SWITCHING INSTRUCTION SECTION

TRANSMISSION SIGNAL

20 DIRECTIVITY INFORMATION

103 DIRECTIVITY CONTROL SECTION

102-1 RECEPTION RF SECTION

102-n RECEPTION RF SECTION

108-1 TRANSMISSION RF SECTION

25 108-n TRANSMISSION RF SECTION

[FIG.12]

RECEIVED SIGNAL

1200 TERMINAL APPARATUS
1201 DIRECTIVITY SWITCHING DECISION SECTION
1202 DIRECTIVITY NUMBER INFORMATION DECISION SECTION
203 RECEIVED SIGNAL DEMODULATION SECTION
5 204 SIR MEASURING SECTION
205 TRANSMISSION SIGNAL GENERATION SECTION
TRANSMISSION SIGNAL
202 RECEPTION RF SECTION
206 TRANSMISSION RF SECTION
10
[FIG.13]
TO DIRECTIVITY CONTROL SECTION 103
1301 DIRECTIVITY SWITCHING TIMING DETERMINING SECTION
1303 DIRECTIVITY NUMBER INFORMATION INSERTION TIMING
15 DETERMINING SECTION
1302 DIRECTIVITY SWITCHING SIGNAL INSERTION TIMING
DETERMINING SECTION
TO DIRECTIVITY NUMBER INFORMATION GENERATION SECTION 1102
TO DIRECTIVITY SWITCHING SIGNAL GENERATION SECTION 1101
20 FROM DIRECTIVITY CONTROL SECTION 103

[FIG.14]
FROM DIRECTIVITY SWITCHING DECISION SECTION 1201
1401 DIRECTIVITY NUMBER INFORMATION EXTRACTION SECTION
25 1403 STORAGE SECTION
1402 QUALITY VARIATION CALCULATION SECTION
TO SIR MEASURING SECTION 204
FROM RECEIVED SIGNAL DEMODULATION SECTION 203

[FIG.15]

START

ST1501 DEMODULATE RECEIVED SIGNAL
5 ST1502 DIRECTIVITY SWITCHING SIGNAL INCLUDED?
ST1503 MEASURE SIR FROM REFERENCE SIGNAL
ST1504 MEASURE SIR FROM DIRECTIVITY NUMBER INFORMATION
ST1505 SIR OUTPUT
ST1506 TRANSMIT TRANSMISSION SIGNAL
10 END